



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,246	01/28/2002	Jeffrey S. Hamilton	T712-11	9406

27832 7590 06/14/2006

TECHNOLOGY, PATENTS AND LICENSING, INC./PRIME  
2003 SOUTH EASTON RD  
SUITE 208  
DOYLESTOWN, PA 18901

EXAMINER

CZEKAJ, DAVID J

ART UNIT	PAPER NUMBER
----------	--------------

2621

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/049,246	Applicant(s) HAMILTON, JEFFREY S.	
	Examiner Dave Czekaj	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 4, 9, 14, 29, 30, 33, 39, 43 and 44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-8, 10-13, 15-28, 31, 32, 34-38 and 40-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

On pages 13-14 applicant argues that Tahara fails to disclose the computation of a rate profile being calculated over time. While the applicant's points are understood, the examiner respectfully disagrees. The examiner notes that computing the rate profile over time is not found in the claim. What is found in the claim is computing a rate profile. See for example Tahara column 12, lines 21-40. There Tahara discloses computing difficulty data and then using the difficulty data to calculate target bit rates, or rate profiles, for each encoder. Therefore the rejection has been maintained.

On page 15, applicant argues that Tahara fails to disclose compressing based on the rate profile. While the applicant's points are understood, the examiner respectfully disagrees. See for example Tahara column 12, lines 51-54. There Tahara discloses supplying the target bit rates, or rate profiles, to the video encoders for encoding the video data. Therefore the rejection has been maintained.

On pages 15 and 17, applicant argues that Tahara fails to disclose a rate profile monitor. While the applicant's points are understood, the examiner respectfully disagrees. See for example Tahara column 12, lines 59-67. There Tahara discloses adjusting the bit rate, or rate profile, so the output does not exceed the transmission rate. The examiner notes that by preventing the output rate from exceeding the transmission rate, Tahara is watching or monitoring the profiles to keep the bit rate within the limits as set forth by the transmission channel. Thus, by keeping the bit rate

within the limit, Tahara is also providing a limit on the sum of the bit rates. Therefore the rejection has been maintained.

On page 16, applicant requests a reference to show support of the Examiners Official Notice with regards to claim 6. Please note the rejection below in view of Zhang.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 5, 17, 19, 21, 32, and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Tahara et al. (6529550), (hereinafter referred to as "Tahara").

Regarding claims 1 and 17, Tahara discloses an apparatus that relates to a coded stream-splicing device (Tahara: column 1, lines 10-12). This apparatus comprises "computing a rate profile associated with a stream" (Tahara: column 12, lines 35-40, wherein the rate profile is the target bit rate), "compressing the digital media advertisement according to the computed rate profile" (Tahara: column 23, line 55 – column 24, line 10, wherein the digital media advertisement is the commercial, which is encoded according to the bit rate), and "inserting the compressed digital media advertisement in the stream at an advertising

opportunity" (Tahara: column 24, lines 11-15, wherein the advertisement is the commercial which is spliced into the stream).

Regarding claims 2 and 32, Tahara discloses "the rate profile is based on a predetermined bit rate" (Tahara: column 12, lines 35-40, wherein the rate profile is the target bit rate).

Regarding claims 3 and 19, Tahara discloses "the predetermined rate profile comprises a maximum bit rate" (Tahara: column 12, lines 60-65, wherein the maximum bit rate is the optimum bit rate).

Regarding claims 5, 21, and 34, Tahara discloses "the predetermined rate profile comprises a start and end point" (Tahara: column 13, lines 29-31, wherein the start and end point are included in the length of data).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7, 22, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tahara et al. (6529550), (hereinafter referred to as "Tahara").

Regarding claims 7, 22, and 35, Tahara discloses "the rate profile comprises a time varying profile from the start point to the end point" (Tahara: column 13, lines 15-35, wherein each packet will contain different information and arrive/depart at different times making them time varying).

Art Unit: 2621

5. Claims 8, 23, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tahara et al. (6529550), (hereinafter referred to as "Tahara") in view of Seo et al. (6208688), (hereinafter referred to as "Seo").

Regarding claims 8, 23, and 36, note the examiners rejection for claim 1, and in addition, claims 8, 23, and 36 differ from claim 1 in that claims 8, 23, and 36 further require the time varying profile to be modeled as a piecewise linear model. Seo teaches that a piecewise linear model can help prevent deterioration (Seo: column 9, lines 24-45). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Tahara and add the piecewise linear model taught by Seo in order to obtain an apparatus that provides the highest possible picture quality.

6. Claims 6, 9-13, 15-16, 18, 20, 24-28, 31, 37-38, and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tahara et al. (6529550), (hereinafter referred to as "Tahara") in view of Zhang et al. (6611624), (hereinafter referred to as "Zhang").

Regarding claims 9, 24, and 37, note the examiners rejection for claim 1, and in addition, claims 9, 24, and 37 differ from claim 1 in that claims 9, 24, and 37 further require null packets. Zhang teaches that null data can be inserted into data in order to match bit rates of two different streams (Zhang: column 12, lines 17-22). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Tahara

and add the null data taught by Zhang in order to obtain an apparatus that avoids overflow/underflow conditions by being able to match bit rates.

Regarding claims 10 and 31, note the examiners rejection for claim 1, and in addition, Tahara discloses determining a second bit rate profile for a second advertising opportunity” (Tahara: column 12, lines 4-6, wherein the second advertisement is the advertisements located on the plurality of channels).

Regarding claim 11, note the examiners rejection for claim 1.

Regarding claims 12 and 27, although not disclosed, it would have been obvious for the profile to supply the instantaneous sum of the first and second bit rate profile (Official Notice). Doing so would have been obvious in order to make the apparatus operate more efficiently by already knowing the sum of the bit rates, instead of calculating them.

Regarding claims 13 and 28, note the examiners rejection for claims 5 and 10.

Regarding claim 15, Seo discloses “the first and second bit rate profiles have first and second high bit rate portions which are staggered” (Seo: figures 3A-3B, wherein the bit rates are shown to be staggered).

Regarding claim 16, note the examiners rejection for claim 1, and in addition, Tahara discloses “a rate profile monitor for monitoring a rate profile” (Tahara: column 12, lines 59-67, wherein the rate is monitored and dynamically changed so the channel will not exceed its maximum capacity).

Regarding claim 18, note the examiners rejection for claim 2.

Regarding claim 20, although not disclosed, it would have been obvious to compress the advertisement at a minimum bit rate (Official Notice). Doing so would have been obvious in order to avoid underflow complications.

Regarding claim 25, note the examiners rejection for claim 10, and in addition, Tahara discloses "encoding the advertisements at an aggregate bit rate profile which is less than or equal to the sum of the first and second profiles" (Tahara: column 12, lines 60-65, wherein the aggregate bit rate is the target bit rate, wherein the sum of the first and second profiles or the stream does not exceed the transmission rate).

Regarding claim 26, note the examiners rejection for claims 1 and 10.

Regarding claims 38 and 40-42, note the examiners rejection for claim 1, and in addition, Tahara discloses "a statistical multiplexor capable of determining an available bandwidth" (Tahara: column 12, lines 7-9).

Regarding claim 6, Zhang discloses "the rate profile to include insertion instructions" (Zhang: column 12, lines 19-24, wherein the insertion instructions are the instructions on when either the null packets or stuffing bytes should be added to the stream).

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within



TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Czekaj whose telephone number is (571) 272-7327. The examiner can normally be reached on Monday - Friday 9 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/049,246  
Art Unit: 2621

Page 9

DJC

*Mehrdad Dastouri*  
**MEHRDAD DASTOURI**  
**SUPERVISORY PATENT EXAMINER**  
*TC 2600*